

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 26 (LIBERTY ROAD) AND I-695 RAMP 3 (TEMP) LOCATED IN BALTIMORE COUNTY. THE TEMPORARY TRAFFIC SIGNAL SHALL BE IN OPERATION FOR THE DURATION OF THE RAMP 2 AND RAMP 3 ROAD CLOSURES. INTERSECTION LIGHTING WILL BE PROVIDED AT THE INTERSECTION. MD 26 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION SHALL OPERATE IN A NEMA 2-PHASE, FULL-TRAFFIC-ACTUATED MODE. THE EASTBOUND LIBERTY ROAD APPROACH WILL OPERATE WITH EXCLUSIVE PHASING FOR THE LEFT TURN MOVEMENT ONTO RAMP 3 (TEMP).

CONTROLLER REQUIREMENTS

A FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER WITH VIDEO DETECTION INTERFACE EQUIPMENT AND DETECTOR RACK SHALL BE HOUSED IN A NEMA SIZE 5 POLE MOUNTED CABINET.

CONTACT PERSONS FOR DISTRICT #4 ARE AS FOLLOWS:

MS. ERIN KUHN ASSISTANT DISTRICT ENGINEER-TRAFFIC PHONE: (410)321-2781
 MR. MICHAEL PASQUARIELLO UTILITY ENGINEER PHONE: (410)321-2841

MR. ANDRE FUTRELL ASSISTANT DISTRICT ENGINEER-MAINTENANCE PHONE: (410)321-2761

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR. CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410)787-7630
 MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS (410)787-7630

MR. ED RODENHIZER CHIEF, SIGNAL OPERATIONS (410)787-7650
 MR. EUGENE BAILEY CHIEF, SIGN OPERATIONS (410)787-7676

THE POWER COMPANY

BGE GAS & ELECTRIC NEW BUSINESS DEPT. (410) 850-4620

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	DESCRIPTION	UNIT	QUANTITY
203030	TEST PIT EXCAVATION	CY	10
585621	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	80
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	75
800000	40 FOOT CLASS II WOOD POLE WITH DOUBLE BACK GUY	EA	2
800000	REMOVE AND DISPOSE OF TEMPORARY TRAFFIC SIGNAL AND ALL ASSOCIATED EQUIPMENT	LS	1
800000	TERRA VIDEO DETECTION CAMERA AND CABLE	EA	2
801106	WOOD SIGN SUPPDRTS 4 INCH X 6 INCH	LF	36
801605	SHEET ALUMINUM SIGNS	SF	48
2]802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	20-150
805050	WEATHER HEAD, 3 INCH	EA	1
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	15
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	100
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS	EA	1
813015	INSTALL OVERHEAD SIGN	SF	15
**816001	VIDEO DETECTION CAMERA	EA	1
**816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2
833060	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER	LF	30
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	2
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	12
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	50
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	220
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	250
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
869101	STEEL SPAN WIRE - 1/4 INCH DIAMETER	LF	175
869102	STEEL SPAN WIRE - 3/8 INCH DIAMETER	LF	175
871201	INSTALL CONTROLLER AND CABINET - POLE MOUNT	EA	1
2]832017	CABLE - 1 CONDUCTOR, NO 4 AWG, TYPE USE, 600V	LF	280

** OLDER (NON-IP BASED) STYLE VIDEO DETECTION CAMERA AND CABLE UP TO 500' WILL BE USED TO PROVIDE SETBACK DETECTION FOR MD 26 AT RAMP 4 SIGNAL. THE NEWER TERRA VIDEO DETECTION CAMERA CANNOT BE USED BECAUSE IT IS NOT COMPATIBLE WITH THE EXISTING VIDEO DETECTION INTERFACE EQUIPMENT IN THE EXISTING CABINET.

EQUIPMENT LIST "C"

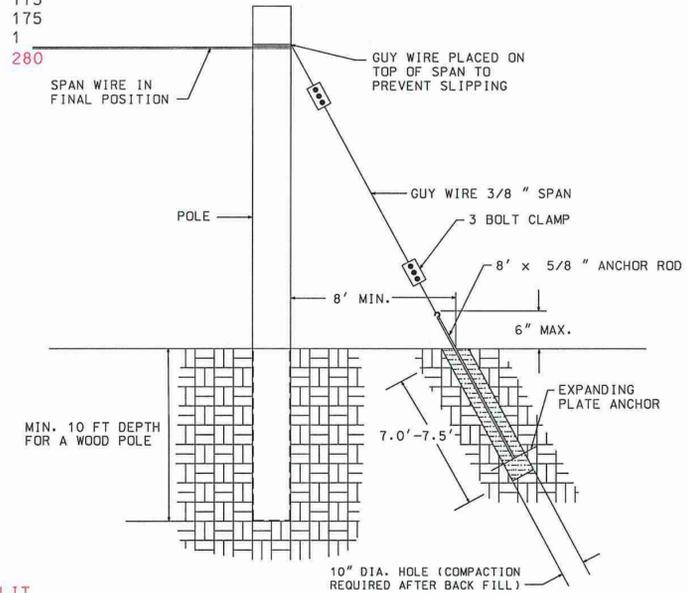
C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

SHA FORCES SHALL REMOVE THE VIDEO DETECTION CAMERAS, CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASING CHART

	1	2	3	4	
	(R)	(R)	(Y)	(Y)	
PHASE 1	←G←	←G←	R	R	→
1 CHANGE	←Y←	←Y←	R	R	→
PHASE 2	←R←	←R←	G	G	→
2 CHANGE	←R←	←R←	Y	Y	→
FLASHING OPERATION	FL/←R←	FL/←R←	FL/Y	FL/Y	→

BACK GUY TYPICAL AND ANCHOR DETAIL



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

CATEGORY CODE	DESCRIPTION	UNIT	QUANTITY
900000	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS	EA	1
971016	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - POLE MOUNT	EA	1
973023	SHEET ALUMINUM SIGNS	SF	15

CONSISTING OF:

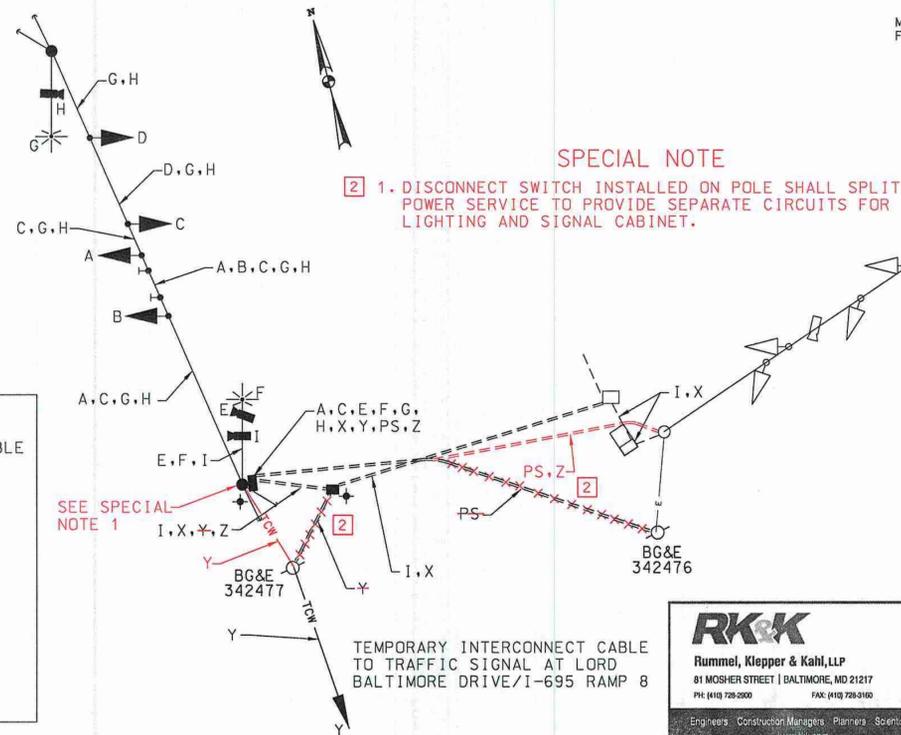
SPAN MOUNT

2 - R3-5 (30"X36")

WIRING KEY

B,D	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	X,Y	12-PAIR COMMUNICATION CABLE SEE INTERCONNECT PLANS FOR DETAILS.
A,C	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	Z	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
* E,H	VIDEO DETECTION CABLE	+	PROPOSED GROUND ROD
I	VIDEO DETECTION CABLE UP TO 500'		
F,G	2-CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)		
PS	UNDERGROUND POWER SERVICE TO BE INSTALLED BY BGE		
	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG) - 2 RUNS FOR POWER SERVICE		

* COST OF CABLE INCIDENTAL TO CAMERA



SPECIAL NOTE

2] 1. DISCONNECT SWITCH INSTALLED ON POLE SHALL SPLIT POWER SERVICE TO PROVIDE SEPARATE CIRCUITS FOR LIGHTING AND SIGNAL CABINET.

SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 26 (LIBERTY ROAD) AT RAMP 3 TEMP WOODLAWN, MARYLAND

REVISIONS	GENERAL INFORMATION SHEET
2] REDLINE NO. 2 MODIFY POWER FEED 05/12/2010	SCALE NONE DATE SEPTEMBER 2009 CONTRACT NO. BA4625168
	DESIGNED BY B.J.G. COUNTY BALTIMORE
	DRAWN BY B.J.G. LOGMILE 03002608.53
	CHECKED BY BLB T.I.M.S. NO. J927
	F.A.P. NO. SEE TITLE SHEET TOD NO.
	TS NO. 4728GI DRAWING SP-2 OF 2 SHEET NO. 201 OF 254

PLOTTED: Wednesday, May 12, 2010 AT 08:51 AM FILE: \\kkm\p2006\2006_beltway\task 05\cadd\plans\PSG-0002_MD26@Ramp3Temp_GI.dgn

BY: B.J.G.

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